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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------------|------------------------|
| 10/688,904 | 10/21/2003 | Gregory L. Kirk | 11641/160 | 3770 |
| 23838 | 7590 | 06/29/2007 | | |
| KENYON & KENYON LLP 1500 K STREET N.W. SUITE 700 WASHINGTON, DC 20005 | | | EXAMINER BOWERS, NATHAN ANDREW | |
| | | | ART UNIT 1744 | PAPER NUMBER |
| | | | MAIL DATE 06/29/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|---|-------------------------------|-----------------------------|--|
| Advisory Action Before the Filing of an Appeal Brief | Application No. 10/688,904 | Applicant(s) KIRK ET AL. | |
| | Examiner Nathan A. Bowers | Art Unit 1744 | |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 19 June 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.


GLADYS P. CORCORAN
SUPERVISORY PATENT EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because: Applicant maintains that the claims are patentable over the prior art made of record. Specifically, Applicant states that the Harrison reference does not disclose a first fluid stream and a second fluid stream comprising first and second substances at first and second concentrations. The cited fluid streams (inlet flow paths 8' and 8'') of Harrison, however, are fully capable of accommodating any fluid comprising a substance at any concentration. The flow paths of Harrison are fully capable of carrying out the intended use set forth in the apparatus claims.

Applicant additionally states that the flow paths of Harrison are intended to intersect and merge, whereas the claims require that the first and second fluid streams do not mix. However, as indicated in the previously presented rejections, it would have been obvious to modify the channel arrangement of Harrison upon consideration of the Jeon reference. Jeon states that it is known in the art to merge a plurality of streams together to form a final stream characterized by a concentration gradient that is substantially perpendicular to the direction of fluid flow. Jeon offers clear motivation that would encourage one of ordinary skill in the art to use this flow configuration. Jeon teaches in column 4, line 66 to column 5, line 21 that this method of forming a concentration gradient is an effective way to create gradients for the study of chemotactic cells.

Applicant additionally states that neither Harrison or Jarnagin, alone or in combination, teach that leukocyte migration mediators or endothelial cells are disposed in a channel, or that leukocytes are delivered to the channel by laminar flow. Again, this concern has been addressed in previous Office Actions. In column 4, lines 40-45, column 5, lines 5-17, and column 20, line 29 to column 21, line 3, Harrison specifically disclose the presence of endothelial cells and various mediators such as selectins and cytokines disposed within the channels. The selectins work as leukocyte capture mediators and leukocyte rolling mediators by reversibly binding to leukocytes and enabling them to roll across the endothelium. Harrison states that the cytokines work to stop leukocyte rolling. Jarnagin also discloses the study of leukocyte migration in column 15, lines 40-48 and column 17, lines 1-6.